PAI 705 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Exam 1

McPeak October 7, 2016

Exam is 15 points. There are 10 questions. Each question is worth 1.5 points. If there are sub questions, each part is worth an equal share of the 1.5 points.

1. We discussed three purposes of social science research. We have also discussed different social science research sampling methods. Below are listed three short descriptions of social science research. For each, identify which is the main purpose of the research and identify the sampling strategy used in the research.

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| Research Description | Purpose  | Sampling Strategy |
| The research team is trying to identify the spectrum of resources available in Isiolo County, Kenya. Over the course of the past year, they have conducted participatory mapping workshops in each Ward of the County with different groups such as women, youth, and elders and then have been reconciling the input of these different groups in production of a map. The map has different layers that identify land use patterns, watersheds, waterpoints, infrastructure, and where NGOs have development projects currently operating. It is to be used as a “…’tool’ for participatory planning and decision-making in support of climate change adaptation in the drylands of Kenya” (p.1) |  |  |
| The research team is trying to assess the impact of a conflict management training conducted in Darfur, Sudan. A random sample of households is drawn from the official list of households in the area within 20 kilometers of where the training was conducted. Last year, 5% of households in this area were given extensive training followed by comic books that illustrated the techniques that are associated with conflict management. 95% of households in this area did not have any training or special treatment regarding conflict management. The sample is designed so that 20% of the sample are households who attending the training and 80% are households that did not attend the training. The research team is trying to identify any impact of the conflict management training on conflict incidence in the current year. |  |  |
| The research team is trying to understand refugee migration to Europe. They are working in the ‘Jungle’ refugee camp near Calais, France. Working through Médecins Sans Frontières (MSF) who provide health care services there, the research team is trying to understand where these people have come from, why did they decide to leave there, and why did they come to the “Jungle”. The team hopes to be able to formulate structured questionnaire and sampling frame that will eventually allow them to more systematically understand the phenomena of refugee flows to Europe. For now, they are working with MSF to locate and interview any residents of the camp who have accessed MSF health services to get a sense of what kinds of questions should go in this questionnaire they are hoping to design. |  |  |

1. Elements of social theory.
2. Describe the relationship between observations and theory when using inductive reasoning.

1. Describe how the relationship between observations and theory when using deductive reasoning contrasts to that of inductive reasoning.
2. Contrast the role of a hypothesis in inductive reasoning and deductive reasoning.
3. Research Ethics.
	1. What are the three basic ethical principles of the Belmont Report?
	2. Explain why special care is needed when conducting research on persons under 18 years old?
	3. What is meant by ‘informed consent’?
4. Measurement Issues.

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| --- | --- |
| Measured item | Category of this measured item (circle one) |
| The number of cars in a parking lot. | Direct observable Indirect observable Construct |
| The number of cars a household reports they own as a response on a survey. | Direct observable Indirect observable Construct |
| Your attitude towards current EPA fuel efficiency regulations based on responses to a series of Lickert questions. | Direct observable Indirect observable Construct |
| Your response to my question about the number of times you have gone to visit Josh last month. | Direct observable Indirect observable Construct |
| How many people in this room are currently wearing hats? | Direct observable Indirect observable Construct |
| Your assessment of the overall professionalism of the PAIA office staff. | Direct observable Indirect observable Construct |
| The quality of governance in a country as measured by the World Bank’s governance indicators. | Direct observable Indirect observable Construct |
| Height measured by a tape measure. | Direct observable Indirect observable Construct |

1. Index and scale issues.

Assume you have results from 4 survey responses to questions about the importance of building a wall on the Canadian border

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Approach A

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| --- | --- |
| Statement | Responses (Circle One) |
| Building this wall is an option to investigate. | Agree Disagree |
| Building this wall is a good idea. | Agree Disagree |
| Building this wall is a top priority. | Agree Disagree |
| Building this wall is the most important priority. | Agree Disagree |

1. Explain how you could use these responses to construct an index and how you could use them to construct a scale.
2. Explain how you could look at the pattern of the responses and evaluate whether you wanted to treat the results as a scale or an index.
3. What is the name of the type of scaling used in construction of the version of the question posed below?

Approach B

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| --- | --- |
| Statement | Responses (Circle one) |
| Building this wall is an option to investigate. | Strongly Disagree Disagree Neutral Agree Strongly Agree |
| Building this wall is a good idea. | Strongly Disagree Disagree Neutral Agree Strongly Agree |
| Building this wall is a top priority. | Strongly Disagree Disagree Neutral Agree Strongly Agree |
| Building this wall is the most important priority. | Strongly Disagree Disagree Neutral Agree Strongly Agree |

d) Contrast advantages and disadvantages of what you can discover using approach A and approach B.

1. True or False.

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| --- | --- |
| Statement | Is it True of False (circle) |
| Confidentiality means a given response cannot be linked to a given respondent even by the researcher. | True False |
| Ideographic explanation seeks an exhaustive understanding of the causes producing events and situations in a single or limited number of cases. | True False |
| A convenience sample is an example of an equal probability of selection method. | True False |
| One-group pretest-postest design is when a researcher studies one group of subjects on a dependent variable following the administration of some treatment stimulus. | True False |
| “Regression to the mean” is a potential threat to internal validity. | True False |
| The deductive method begins with a set of observations, and analyses these observations to find patterns in the data to develop theory. | True False |
| A trend study monitors a given characteristic of the population over time using different samples. | True False |
| Zimbardo used publicly available social statistics to understand patterns in human behavior in one of the earlier sociological studies.  | True False |

1. Measures.

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| **Item measured** | **What kind of measure is it? (circle)** |
| 6 different age and gender categories: male youth or female youth (under 18); male working age or female working age (18-66); male elderly or female elderly (67+) | Nominal Ordinal Interval  |
| Attitudes towards the Attorney General using Semantic Differential questions | Nominal Ordinal Interval  |
| IQ | Nominal Ordinal Interval  |
| Current GPA in your master’s program | Nominal Ordinal Interval  |
| Ranking of the best IR masters programs for a policy career in IR. | Nominal Ordinal Interval  |
| Which career tracks in the IR program are people in this class in? | Nominal Ordinal Interval  |
| Did you get your undergraduate degree in the United States or outside of the United states? | Nominal Ordinal Interval  |
| Do you think a blog devoted to IR should count or should not count in the professional evaluation of IR faculty? | Nominal Ordinal Interval  |

1. Reliability and Validity.
	1. We conducted a study in Senegal where we traced out the livestock migration paths followed by herders on long distance migration. As part of that study, we established vegetation transects. On these 1 kilometer long transects, we identified a 100 square meter zone (zone A) where three one square meter samples of vegetation was collected each month over the 4 month rainy season. The sample was dried, weighed, and analyzed in the lab for nutritional content as animal feed. The person collecting the samples wrote down the wrong coordinates for the 100 square meter zone and visited a 100 square meter zone (zone B) that is 26 kilometers away from zone A. All our results are from zone B. The estimates on nutritional content for the samples we have for zone B are very consistent over time. Describe my situation in terms of the reliability and validity of my observations for assessing the nutrition content of feeds on the transect in zone A.
	2. Contrast the following concepts: face validity and content validity. The object in question is an application packet to the MAIR program. The concept we are trying to assess is the likelihood of success in our MAIR program. For each applicant we have GRE scores, undergraduate transcripts, personal statements, recommendation letters, and responses to nominal questions about hair color and favorite ice cream flavor. How do different elements of this application packet illustrate these two different concepts of validity?
2. Assign the name of the scale to the description.

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| Put name of scale here | Description of scale |
|  | A scale that is based on the idea that people who support a strong indicator of a variable will also support weaker indicators of this variable. |
|  | Symmetric scale centered on zero that captures a range of responses both negative and positive |
|  | Results from questions that pair two opposite adjectives and have respondents place their reaction on their degree of closeness to either adjective. |
|  | Captures the willingness of people to participate in social relations of varying degrees of closeness with other kinds of people. |
|  | A type of composite measure where weights are assigned by ‘judges’ to assess the strength of particular indicators |

1. Definitions and contrasts.
	1. Contrast a panel and a cross sectional data set.
	2. Contrast a trend study and a cohort study.
	3. Contrast a unit of observation and a unit of analysis.
	4. Contrast a necessary cause with a sufficient cause.